James L. Overbeck et al

Serial No.

09/733,162

Page No.

2

## **CLAIM AMENDMENTS**

1.-65. (cancelled)

66. (currently amended) A shield for a device for measuring optical characteristics of an

object in a field of view, the device having an illumination source comprising:

a one-piece unitary hollow body including first and second ends, said first end

including [defining an aperture through which the object is measured;] means for [engaging]

removably mounting said body [against] on the measuring device [whereby ambient light is

restricted from entering said body; and], said second end defining an aperture through which the

object is measured, said second end including a reference area [secured to] integral with the body

and proximate said aperture, said reference area being in the field of view [and adapted to

establish an illumination reference in the field of view].

67.-68. (cancelled)

69. (currently amended) [The shield of claim 66 including] A shield for a device for

measuring optical characteristics of an object in a field of view, the device having an

illumination source comprising:

a body defining an aperture through which the object is measured;

means for engaging said body against the measuring device whereby ambient

light is restricted from entering said body;

a reference area proximate said aperture, said reference area in the field of view;

and

means [to indicate] for indicating at least one [chosen from] of the origin of the

shield, lot number of the shield, expiration date of the shield and patient information, said

James L. Overbeck et al

Serial No.

09/733,162

Page No.

3

indicating means disposed proximate said aperture and in said field of view.

70. (currently amended) The shield of claim 69 including [means for restricting] a peripheral wall that restricts ambient light from entering said body through said aperture.

71. (currently amended) The shield of claim 70 wherein said [restricting means] peripheral wall circumferentiates said aperture.

- 72. (original) The shield of claim 69 wherein said body is disposable.
- 73. (original) The shield of claim 69 wherein said body is reusable.
- 74. (currently amended) A shield for a color measuring device used in dental applications comprising:

a body defining a cavity and including first and second [end] ends, said first end separated from said second end a pre-selected distance;

a first aperture defined by said first end[, said aperture for disposing] to be disposed in a position chosen from against and adjacent an object to be color measured;

a second aperture defined by said second end [for disposing] to be disposed proximate [an illumination source] the color measurement device; and

a reference area associated with said body proximate said first aperture [adapted to establish an illumination compensation factor].

75. (currently amended) The shield of claim 74 wherein the shield is [adapted] at least one of disposable and resealable to prevent contamination from passing from a first patient to subsequent patients.

76. (original) The shield of claim 75 comprising means for releasably attaching said body to the color-measuring device.

James L. Overbeck et al

Serial No.

09/733,162

Page No.

4

77.-79. (cancelled)

80. (currently amended) A shield for a device used to measure the color of dental objects

within a field of view comprising[+] a one-piece integral body defining a cavity through which

illumination passes, said body being of a predetermined length[; and], said body including means

for attaching said body to an instrument, said body including an integral illumination reference

area [associated with said member] in the field of view.

81. (currently amended) The shield of claim 80 [comprising] wherein said attaching

means comprises means for releasably securing said [member] body to the color measuring

device.

82. (currently amended) The shield of claim 81 wherein [the member] said body is

disposable.

83. (currently amended) The shield of claim 82 wherein [the member] said body is

opaque to prevent ambient light from entering said cavity.

84. (previously presented) The shield of claim 83 comprising indicia means for

providing information captured in the field of view.

85. (cancelled)

86. (currently amended) An instrument for acquiring a color image of a tooth within a

field of view, said instrument comprising:

a housing;

an illumination source within said housing for illuminating the field of view;

an image sensing device within said housing for sensing an image of the tooth;

and

James L. Overbeck et al

Serial No.

09/733,162

Page No.

5

a disposable shield including a first end removably connected to said housing and a second end defining an aperture within the field of view, the shield providing a desired spacing between the tooth and the image sensing device when the second end is placed against a portion of a patient's mouth, said second end including a reference area [that establishes a compensation factor for illumination within the field of view].

87. (previously presented) The instrument of claim 86 wherein said first end provides a light tight seal against said housing.

88.-132. (cancelled)

133. (new) The shield of claim 66 wherein said reference area is adjacent the aperture and wherein the reference area is a uniform color.

134. (new) The shield of claim 133 wherein the reference area includes portions on opposite sides of the aperture.